

# FERALS AT WALGA ROCK

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Walga Rock is a granite monadnock alongside the Cue-Dalaranga Road, 46 km west of Cue. It is one of a group of such granite hills rising from a flat plain which drains westwards to the Sandford and ultimately the Murchison River. The site was of significance to Aboriginal people, who decorated a cave with some very fine rock art. Europeans have also favoured it as a camping spot, and currently it is promoted as a tourist destination. It is included within the Austin Downs station lease.

The site lies in the Eremaean Botanical Province, Austin Botanical District, Upper Murchison Sub-region (Beard 1976). The vegetation of the flats is acacia shrubland to open shrubland over sparse low shrubs and bunch grass (*Aristida contorta*). However, since the rocks harvest water, a different vegetation survives around them. The complex is described as the Norrie Land System in the pastoral survey by Curry *et al.* 1994. The soil slopes gently away from the rock. Dense shrubbery grows immediately adjacent to the rock where drainage is concentrated, succeeded by low bunch grass on the sandy pediment. At Walga Rock,

this zone is more or less bounded by the ring road.

On 18 September 1999, I recorded introduced species on or immediately adjacent to the rock, i.e. on the Norrie Land System. Most annual plants were already over, therefore this list is probably far from complete. Nevertheless, it gives some idea of the change which is occurring in natural communities, even in remote areas such as this.

## FAUNA

*Equus caballus*, Horse. Three seen, pushing in among the shrubs to graze the still-green ground herbage. Possibly domestic rather than feral.

*Equus asinus*, Donkey. Some hoofmarks which could have been donkey were noted.

*Capra hircus*, Goat. Small group of two nannies, two kids, seen camping and browsing on the rock itself.

*Ovis aries*, Sheep. Three seen, grazing on claypan grasses in gnammas high on rock. Presumably domestic.

*Oryctolagus cuniculus*, Rabbit. Common around base of rock.

*Mus musculus*, House Mouse. Numerous around the main camp site, and probably other bushy areas also.

*Vulpes vulpes*, Fox. Tracks and scats common. In early evening, a fox cub jumped up onto the bonnet of the vehicle, in order to investigate whether the washing up still carried anything edible.

## FLORA

### POACEAE

*Avena barbata*, Wild Oats. Occasional at disturbed campsites, especially on rabbit dung piles.

*Pentstemon airoides*, False Hair Grass. Abundant among bunch grass.

*Vulpia myuros*, Silver Grass. Occasional among bunch grass at water-gaining sites, close to rock and in washways.

### ASTERACEAE

*Hypochaeris glabra*, Flatweed. Common at edge of shrub patches.

*Sonchus oleraceus*, Sow Thistle. Occasional in deep shade.

### BRASSICACEAE

*Sisymbrium orientale*, Indian Hedge Mustard. Single plant noted in fenced area around art site - removed and destroyed after observation.

### CARYOPHYLLACEAE

*Silene nocturna*, Catchfly. Occasional at edge of shrub patches.

### CONVOLVULACEAE

*Cuscuta epithymum*, Lesser Dodder. Widespread, abundant parasite on ground layer plants, including bunchgrass and annuals such as *Angianthus tomentosus*.

### POLYGONACEAE

*Emex australis*, Doublegee. Common at all campsites.

*Rumex vesicarius*, Ruby Dock. One dense infestation at main camp site, single plants scattered elsewhere, along tracks and among bunch grass.

### PRIMULACEAE

*Anagallis arvensis* var. *caerulea*, Blue Pimpernel. Common under dense shrubbery.

### SOLANACEAE

*Solanum nigrum*, Blackberry Nightshade. Common in dense shade under shrubs close to rock.

## DISCUSSION

This rock has mostly bare gnammas and no herbfields, unlike similar granites in the Wheatbelt. This sparsity of plants must be related to the aridity and the high rock temperatures which will be reached in summer since, even on grazed farmland granites, some low vegetative cover usually remains on gnamma floors. However, it is noticeable here that the hooves of sheep and goats have cracked the surface crust on gnamma floors and that this leads to wind erosion of the fragile soil

accumulation beneath. Macropod feet do not have as drastic an effect, therefore it is possible that, in the hundred or so years since pastoral settlement, the flora (and presumably fauna) in the gnammas has become severely depauperate. Evidence from scats shows that in wetter seasons rabbits also feed on the outcrop, and this must exacerbate the degradation.

Foxes must have had a severe effect on any small to medium sized native mammals which once occurred in the area, and also on lizards and frogs – although it is possible that they have merely replaced the dingo.

Apart from the False Hair Grass, all the plants are likely to have been brought to the site by fauna, either externally or internally. At the moment they are a relatively minor component of the flora. The greatest threat to the integrity of the site would appear to be Ruby Dock and Paterson's Curse (*Echium plantagineum*, Boraginaceae), both of which are highly invasive and totally alter the character of the vegetation communities they infest. The latter does not yet occur here (nb: as at date 18/09/1999) although there is a large infestation at Austin Downs station, 36 km east.

It is likely to be transported by vehicles, and to appear first at water-gaining sites along track edges.

At the moment, a determined spraying effort could control – even eliminate – Ruby Dock, while annual checkups could prevent the invasion of Paterson's Curse. However, since there is no authority really responsible for the site, and everywhere there are only limited resources available for weed control, it is difficult to know how this could be achieved. Perhaps this example could be presented to the body responsible for implementing the State Weed Plan, with a request that a trust fund be set aside and a 'flying squad' trained and then employed to tackle such weed problems in remote localities.

#### REFERENCES

- BEARD, J.S. 1976. *Vegetation Survey of Western Australia, Sheet 6*, Murchison. Uni WA Press, Perth.
- CURRY, P.J., PAYNE, A.L., LEIGHTON, K.A., HENNIG, P. and BLOOD, D.A. 1994. An inventory and condition survey of the Murchison River catchment, Western Australia. Tech. Bull. No 84. Dept. of Agriculture, Perth.